
From: Dvija Michael Bertish [mailto:dvija@pacifier.com]

Posted At: Wednesday, May 17, 2006 12:13 AM

Posted To: Western Comments

Conversation: NPDES Phase II Comments

Subject: NPDES Phase II Comments

Importance: High

Public Comment on Washington State Department of Ecology's
NPDES and State Waste Discharge General Permit for Discharges for Small Municipal
Separate Storm Sewers in Western Washington

Comment submittal deadline May 19, 2006

From: Dvija Michael Bertish, Chairman
Rosemere Neighborhood Association

Please add these public comments to the administrative record for consideration, and
confirm receipt via return email.

Please note that these comments are arranged by first quoting the section of the
document, followed directly by comments for each of the quoted sections.

Page 15, Line 8 , item a:

“A municipal storm sewer system map shall be developed no later than four years from
the effective date of this permit. Municipal storm sewer maps shall be periodically
updated and shall include the following:”

Comment on Page 15, Line 8 , item a:

The requirement for mapping municipal storm sewers must include the specific
identification of all sections of the storm sewer that are comprised of perforated pipes.
Perforated pipes are designed to collect and convey groundwater, especially in areas
where water tables are high and have the tendency to surface in urban areas. Municipal
storm sewers can use hundreds of miles of perforated pipes. This is especially important
where urban septic tanks exist, often in dense numbers in the urban environment. If
perforated pipes coexist in areas with operating septic tanks, the perforated pipes will
then collect and convey (under certain conditions) groundwater that is contaminated with
septic effluent. The mapping requirements must also include a separate overlay that
identifies the locations of all septic tanks in operation throughout the municipality in
order to compare the co-existence of septic tanks with perforated storm pipes. This
mapping element should also be compared with overlays that define municipal wellheads
for areas that are groundwater dependent for the potable water supply. It is readily
apparent that groundwater supplies are drawn from areas that co-exist within reach of
septic tank drainfields and groundwater plumes that are contaminated specifically by
septic tank effluent. These mapping elements are vital to hydrogeologic groundwater
flow mapping and help determine the quantities of groundwater that can be conveyed by

municipal storm sewer systems via perforated pipes that feed directly into surface water bodies. These mapping requirements should be a mandatory element of the detection and elimination of illicit discharges from the storm sewer system.

As population increases in high density urban areas, and rural areas become more developed, there is an increased potential for contamination from nitrates and bacteria within groundwater used by domestic and municipal wells from septic systems that have been improperly constructed, poorly maintained or abandoned. Approximately two to five percent of these systems fail annually, and municipalities can have many tens of thousand of septic systems in operation within their borders. According to comprehensive growth management plans, are the most prevalent source of groundwater contamination and contribute the greatest volume of wastewater to groundwater. Septic systems fail for a variety of reasons, including high water tables, lack of maintenance, clogging, damage to the pipes, and compacted soils in the drainfields. Under these conditions, it is highly likely that contaminated groundwater will spill into the MS4s, and therefore would be of tremendous concern for the protection of human health and public safety, particularly if septic tank effluent is being spilled into waterbodies that are used for swimming. The permittee should be required to post health warning signs for any waterbody that is 303(d) listed for fecal coliform.

Page 15, line 13, item i, under "minimum performance measures"

"Each permittee shall map the attributes listed below for all storm sewer outfalls with a 24 inch nominal diameter or larger, or an equivalent cross-sectional area for non-pipe system:"

Page 15, line 13, item i, under "minimum performance measures"

The mapping requirement of any stormdrain system must include all components, not just those that are 24 inches in diameter. Municipal storm sewer systems are comprised of pipes of variant dimensions and configurations, much of which may be of a lesser diameter. Municipalities already have substantial inventories of pipe sizes and locations, all of which can be used to create reasonably accurate maps without excessive burden to the permittee. Excluding pipes that are less than 24 inches would cause the generation of insufficient maps and prevent a thorough understanding of variables that contribute to storm water movement and would hamper the detection of illicit discharges. The storm sewer system should be accurately and completely inventoried and represented, especially for the purposes of maintenance and operations of such a system. Substantial sources of contamination can be caused by smaller pipes, and this should not escape review. The threshold of measurement should be lowered to include all pipe sizes in the storm sewer system.

Page 13, line 4, item a under "minimum measures"

"No later than two years after the effective date of this Permit, the Permittee shall implement or participate in an education and outreach program targeting a minimum of two of the audiences listed in i-viii below.:

Comment on Page 13, line 4, item a under “minimum measures”

It is currently the sole responsibility of local health departments to monitor the operations and maintenance of septic tanks within municipal jurisdictions. City and county governments are not required to cooperate with health departments in the enforcement of septic tank standards, inspections, permitting, or mapping of septic tanks, one of the primary sources of groundwater contamination. Minimum measures under this section should include the development of public education programs specific to compliance measures for septic tank maintenance and operations.

Page 19, Line 15

“To the extent allowable under federal and state law, each permittee shall develop, implement and enforce a program to reduce pollutants in stormwater runoff to a regulated small MS4 from new development, redevelopment and construction site activities. This program shall be applied to all sites that disturb land area 1 acre or greater...”

Comment to Page 19, Line 15

The one acre threshold is listed in several sections of the draft document, and this threshold is far too low. The one acre threshold conflicts with the same threshold already defined in the 2005 Stormwater Management Manual for Western Washington, where such a threshold is set at 2500 square feet. The Phase II NPDES permits must require the adoption of the same standards established in the 2005 Stormwater Management Manual for Western Washington in order for Best Management Practices to be utilized effectively. It makes no sense to have varied thresholds, especially if construction is taking place on parcels that abut 303(d) listed waters, buffers, or sensitive wetlands. The goal of this item should be to work in tandem with erosion control standards already established in the 2005 Stormwater Management Manual for Western Washington in order to avoid sedimentary infiltration into MS4's or direct runoff into waterbodies during construction operations.

Page 22, line 20, item d:

“The program shall include a procedure for keeping records of inspections and enforcement actions by staff, including inspection reports, warning letters, notices of violations, and other enforcement records...Permittees shall keep records of all projects disturbing more than one acre...”

Comments for Page 22, line 20, item d:

Again, the one acre threshold is insufficient and should remain at the 2500 square foot threshold as identified in the 2005 Stormwater Management Manual for Western Washington. Furthermore, the Permittee should be required to provide historical data on enforcement issued to DOE, especially when DOE defers to the municipality for enforcement of standards. There are instances where fines have been levied against construction contractors for violations, but there was no evidence that the fines were ever collected, or that the actual problem cited was ever corrected. If municipalities are going to the main enforcement entity, DOE must be able to audit these corrective actions on a test basis in order to ensure compliance.

Page 24, line 1, item f:

“Establishment and implementation of practices to reduce stormwater impacts associated with runoff from streets, parking lots, roads or highways owned or maintained by the Permittee, and road maintenance activities conducted by the Permittee.”

Comments on Page 24, line 1, item f:

This item should specify regular cleaning activity of storm drains on paved roadways that are often blocked with dirt, garbage, and other debris, not just surface street cleaning. This would require opening the vault and removing blockages. This activity should be regularly scheduled, especially during the rainy season when sediment does block the drains. Furthermore, there should be a checklist included on construction projects where street-level storm drains are blocked during construction to prevent sedimentary infiltration. There have been instances where completed projects left blocking devices in place long after the construction project was completed, and staff did not go back to clear the storm drains to restore regular functioning.

Page 33, Line 11, Item A under “Monitoring”

“Permittees are not required to conduct water sampling or other testing during the effective term of this permit, with the following exceptions:”

Comments on Page 33, Line 11, Item A under “Monitoring”

Since DOE is not capable of completing the required TMDL studies for all 303(d) listed waterbodies in the court-appointed timeframe, the DOE should enlist the aid of municipalities to conduct monitoring. The permit should require municipalities to conduct water sampling and monitoring for the parameters for which the impaired or endangered waterbodies are listed, and these parameters should be included as part of the requirements for illicit discharge detection and elimination. This would help to identify toxicant sources that contribute to the water quality failures and help establish problem solving priorities.

The SWMP shall include ongoing opportunities for public involvement through advisory councils, watershed committees, participation in developing rate-structures, stewardship programs, environmental activities and other similar activities.

Comments on Page 14, line 23 under item “2. Public Involvement and Participation”

The SWMP and all associated components should be open for public comment, and the Permittee should be required to respond to and address all public comments rather than simply adding comments to the record.

Page 34, Line 14, under “Stormwater Monitoring”

“Each city having a population greater than 75,000 shall identify two outfalls or conveyances where stormwater sampling could be conducted.”

Comments on Page 34, Line 14, under “Stormwater Monitoring”

Cities were determined to be Phase I or Phase II many years ago. Since then, a city could have surpassed the population threshold for which that classification was based due to rapid growth and annexation. Cities should be reclassified based on their current populations, not historical populations. It is insufficient for a phase II city that currently has a population that exceeds 100,000 to monitor only two outfalls or conveyances for longterm monitoring, especially if the municipality has outfalls to multiple 303(d) listed waterways. At the very least, there should be an upstream and downstream monitoring point in order to gauge cumulative effects of toxicants for all 303(d) listed waterbodies, and monitoring should include parameters for which such waterbodies are listed.

Monitoring should be conducted during all seasons and under various weather conditions, including dry weater flows and storm events. Monitoring parameters should include the detection of phosphorus, nitrogen, surfactants, and fluoride to help determine the presence of illicit connections to the stormwater system. Monitoring programs should include both water chemistry sampling and biological sampling methods as best available science.